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EP. 0046775

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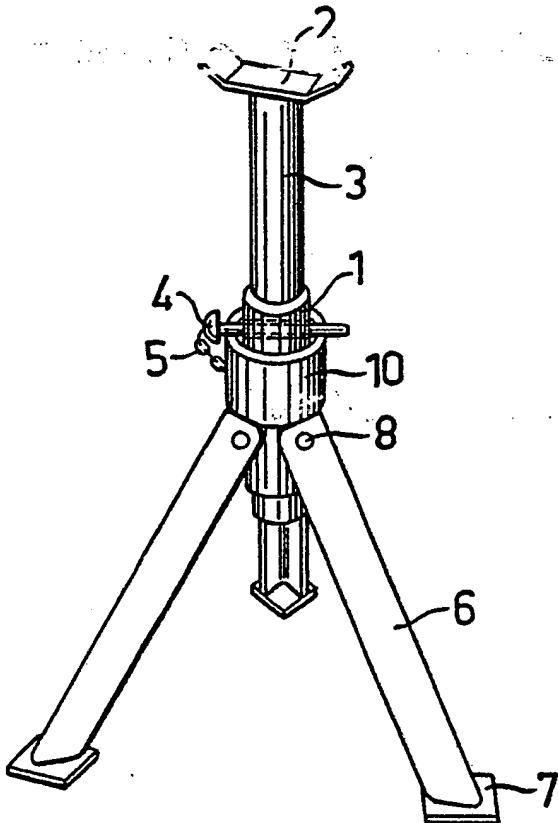
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 3: F16M 11/00	A1	(11) International Publication Number: WO 81/02462 (43) International Publication Date: 3 September 1981 (03.09.81)
(21) International Application Number: PCT/SE81/00046		(81) Designated States: AT, AT (European patent), BR, CH, CH (European patent), DE, DE (European patent), DK, FI, FR (European patent), GB, GB (European patent), JP, NL (European patent), NO, SE (European patent), US.
(22) International Filing Date: 19 February 1981 (19.02.81)		
(31) Priority Application Number: 8001337-8		
(32) Priority Date: 20 February 1980 (20.02.80)		Published <i>With international search report</i>
(33) Priority Country: SE		
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## (54) Title: TRESTLE

Applicant: ...

Trestle comprising a support adjustable in vertical direction in a stand and legs attached to the stand. Known trestles of this type comprise legs, which are welded on the stand and, therefore, are bulky and difficult to store and to take along. In order to overcome this disadvantage, according to the invention a trestle is proposed, the legs (6) of which are pivotally attached to the stand (1) so as from a folded-out position, in which they support the trestle in operative position, to be pivoted to a folded-in position, in which the legs (6) substantially are in parallel with the support (3) or stand (1), and a locking ring (10) is provided to lock the legs (6) against unintentional folding-in movement when the trestle is in operative position.



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Trestle

This invention relates to a trestle, which comprises a support vertically adjustable in a stand, and legs attached to the stand.

Trestles knowingly are utilized for supporting objects of various kind, and especially for trestling cars which, for example, are to be repaired or the tires of which are to be exchanged, and also for trestling cars when they are to be stored for longer periods. The trestles, in order to be expedient, must be constructed so that they do not tend to turn over, but stand very firmly on their support. For this purpose, the known trestles are provided with at least three projecting legs, which are welded on the trestle stand. The leg end portions, which are positioned in the base plane and normally provided with footplates, are located at a relatively great distance from the vertical centre line of the stand. Due to their projecting legs, however, known trestles require very much space and, therefore, are difficult to store and definitely unsuitable to be taken along, for example in the luggage compartment of a car.

The present invention, therefore, has the object to eliminate this disadvantage of known trestles. This object is achieved in that the trestle according to the invention has been given the characterizing features defined in the attached claims, viz. in principle that the legs are attached pivotally to the stand so as from their projecting position, in which they support the trestle in operative position, to be pivoted to a folded-in position, in which the legs substantially are in



parallel with the stand and support of the trestle, and a locking ring is arranged so as to lock the legs against unintentional folding-in movement when the trestle is in operative position.

The invention is described in greater detail in the following, with reference to the accompanying drawings, in which Fig. 1 is a view of the present trestle in operative position with projecting legs, Fig. 2 is a view of the same trestle with folded-in legs, Fig. 3 shows an alternative embodiment, and Fig. 4 is a section substantially along the line IV-IV in Fig. 3.

The trestle according to the present invention comprises a stand 1 in the form of a sleeve, in which a support 3 is located which is provided with a carrying plate 2. Said support 3 is movable in longitudinal direction in the stand 1 and, thus, can be adjusted to different height positions. The support 3, furthermore, for being locked relative to the stand 1 in its adjusted height position is provided with a plurality of spaced holes, into which a cotter 4 inserted through holes in the stand 1 can be introduced. Said cotter preferably is connected to the stand 1 by a chain 5 or the like.

The present trestle further comprises a number of legs 6, which are attached to the stand 1. Each leg is provided at its end remote from the stand 1 with a footplate 7. The legs as shown have substantially U-shaped cross-section, the open side facing to the stand.

The legs 6 are attached pivotally to the stand by dowels 8, which are supported each by a bearing bushing (not shown) located on the outside of the stand. Each leg 6 is formed above its pivot point with a slightly outward bent supporting tongue 9, which is capable to limit the outward swing move-



ment or outward folding of its leg to projecting position, in which the trestle in operative position is supported, which position is shown in Fig. 1 and determined by the supporting tongue of the respective leg.

In operative position of the trestle, thus, the supporting tongues 9 of the folded-out legs abut the stand 1. When the trestle is loaded, the supporting tongues 9, thus, are additionally pressed against the stand 1. Hereby a locking of the legs in folded-out position is obtained, but as this locking depends on the size of the load, an additional locking is provided which has the form of a locking ring 10, which is movable about the stand 1 and renders it impossible that the legs unintentionally are folded in when the trestle is in operative position. The locking ring 10, more precisely, in its locking position as shown in Fig. 1 encloses the locking tongues 9 of the legs which abut the stand and take up the load and locks said tongues against the stand. The locking ring, furthermore, in its locking position is prevented from moving relative to the stand 1 both by the cotter 4 and by the legs 6, as appears from Fig. 1.

For folding together the present trestle, the locking ring 10 subsequent to the removal of the cotter 4 is moved to the carrying plate 2 until the tongues 9 are entirely released. Thereafter the legs 6 can be folded in to a position substantially in parallel with the stand, in which position the legs then are locked in that the locking ring 10 again is moved against the supporting tongues 9 of the legs and the cotter 4 is inserted in suitable holes in the stand 1 and support 2, which in folded-together position of the trestle, which is the position suitable for transport and storage, preferably is inserted entirely in the stand 1.

A modified embodiment of the present trestle is shown in Figs.



3 and 4, in which the reference numerals used are the same as for corresponding details in Figs. 1 and 2. The modified embodiment differs from the one shown in Figs. 1 and 2 especially in that the locking ring 10 is arranged movable about the stand 1 between the stand end portion facing to the ground and the pivot point 8 of the legs at the stand. The locking ring 10 is provided with projecting fastening lugs 12 corresponding in number to the legs 6, which lugs by means of a stud 13 or rivet are hingedly connected each to a link 14 extending radially outward from the stand 1. Said links are hingedly connected at their other end each with a leg 6 by means of a stud 15 secured in the leg 6 with U-shaped cross-section. On both sides of the link 14 distance sleeves 16 are located in order to maintain the links 14 substantially radially directed and to prevent them from moving in lateral direction on the respective stud 15. The links 14 may be connected to respective distance sleeves 16.

For folding-out the legs 6, the locking ring 10 is moved downward until it is stopped against a stop edge 17 attached to the end of the stand. Said stop edge 17 shall be located so in vertical direction that the studs 13 of the links 14 are located in or beneath a plane through the other studs 15 of the links when the locking ring 10 abuts the stop edge 17 and the legs 6 are in outward pivoted position. Hereby the locking ring prevents unintentional inward pivoting of the legs 6 when the trestle is in operative position. In operative position of the trestle, thus, loads are taken up by the links 14 and the locking ring 10 located about the stand 1.

The present invention is not restricted to the embodiments described above and shown in the drawings, but can be altered, modified and completed in many different ways within the scope of the invention idea defined in the attached claims.



Claims

1. A trestle comprising a support adjustable in vertical direction in a stand and legs attached to the stand, characterized in that the legs (6) are attached pivotally to the stand (1) for pivoting from a folded-out position, in which they support the trestle in operative position, and in which a locking ring (10) locks the legs (6) against unintentional folding-in movement, to a folded-together position, in which the legs are substantially in parallel with the support (2,3).
2. A trestle as defined in claim 1, characterized in that the legs (6) at their end portion remote from the ground are provided with tongues (9), which in folded-out position of the legs abut the stand (1) as a support taking up loads.
3. A trestle as defined in claim 1 or 2, characterized in that said locking ring (10) is movable about the stand (1).
4. A trestle as defined in claim 3, characterized in that the locking ring (10) in its locking position is locked against movement by a cotter (4) locking the support (2,3) to the stand and by the tongues (9) of the legs which the locking ring in its locking position encloses.
5. A trestle as defined in any one of the preceding claims, characterized in that the legs have substantially U-shaped cross-section and are supported at the stand (1) each by a dowel (8).
6. A trestle as defined in claim 5, characterized



ed in that the stand (1) has the form of a sleeve with outside bearing bushings for the dowels (8) pivotally supporting the legs (6).

7. A trestle as defined in any one of the claims 1 - 3, characterized in that between the locking ring (10) and each of the legs (6) a link is hingedly connected for taking up the load in the operative position of the trestle.

8. A trestle as defined in claim 7, characterized in that a stop shoulder (17) is located on the stand for the locking ring (10), which shoulder is located so in vertical direction that it stops the locking ring when the hinge point of the links at the locking ring is located in or beneath a plane through the hinge point of the links at the legs (6).



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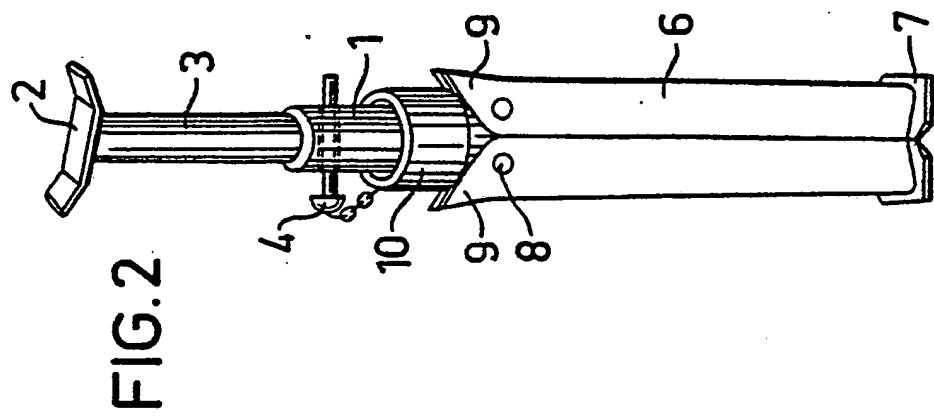


FIG. 2

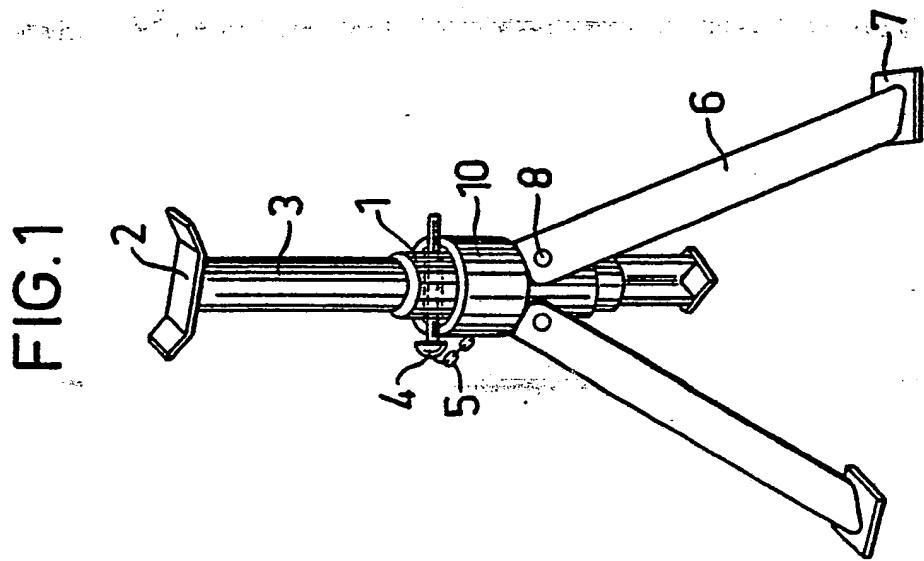
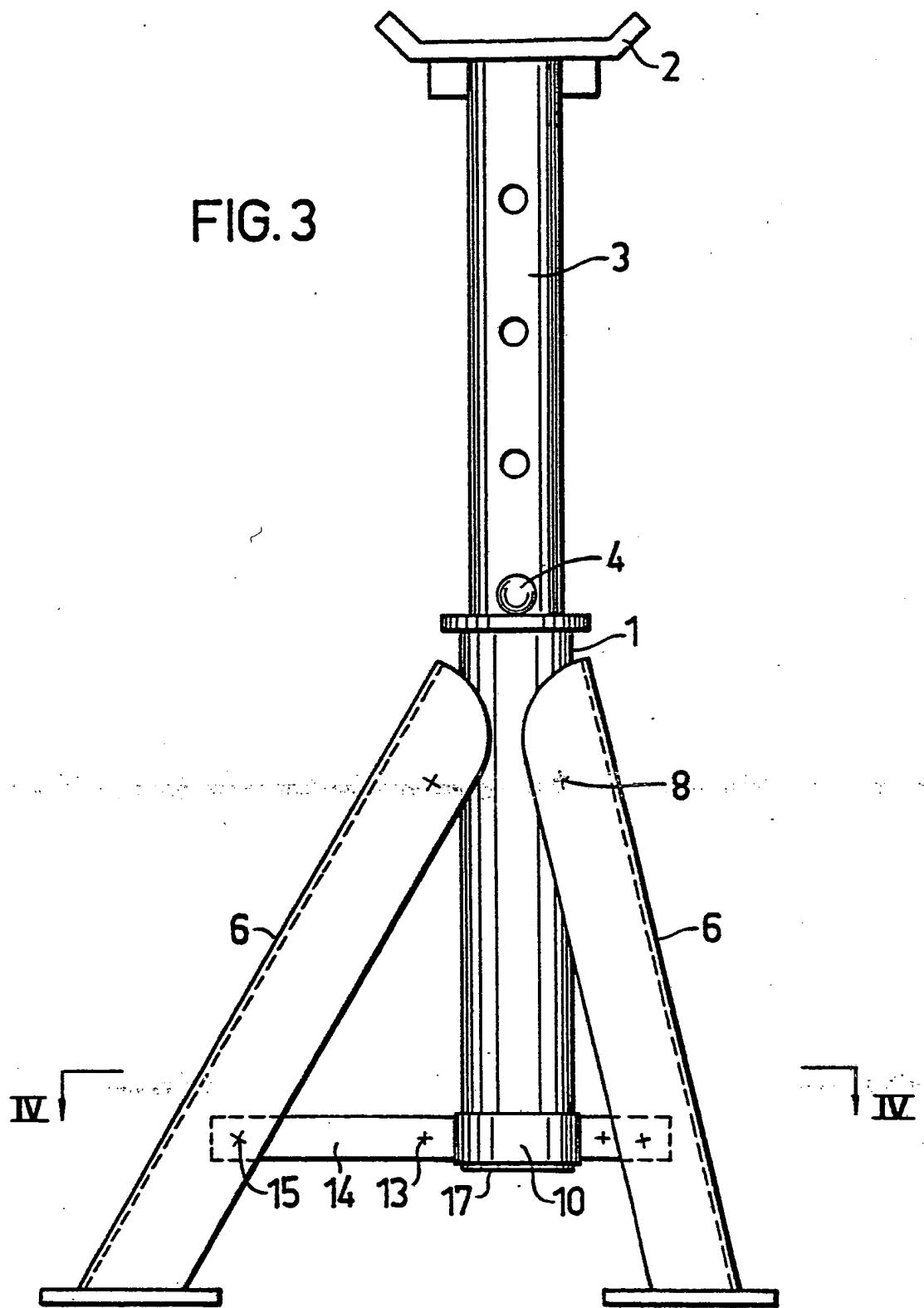


FIG. 1

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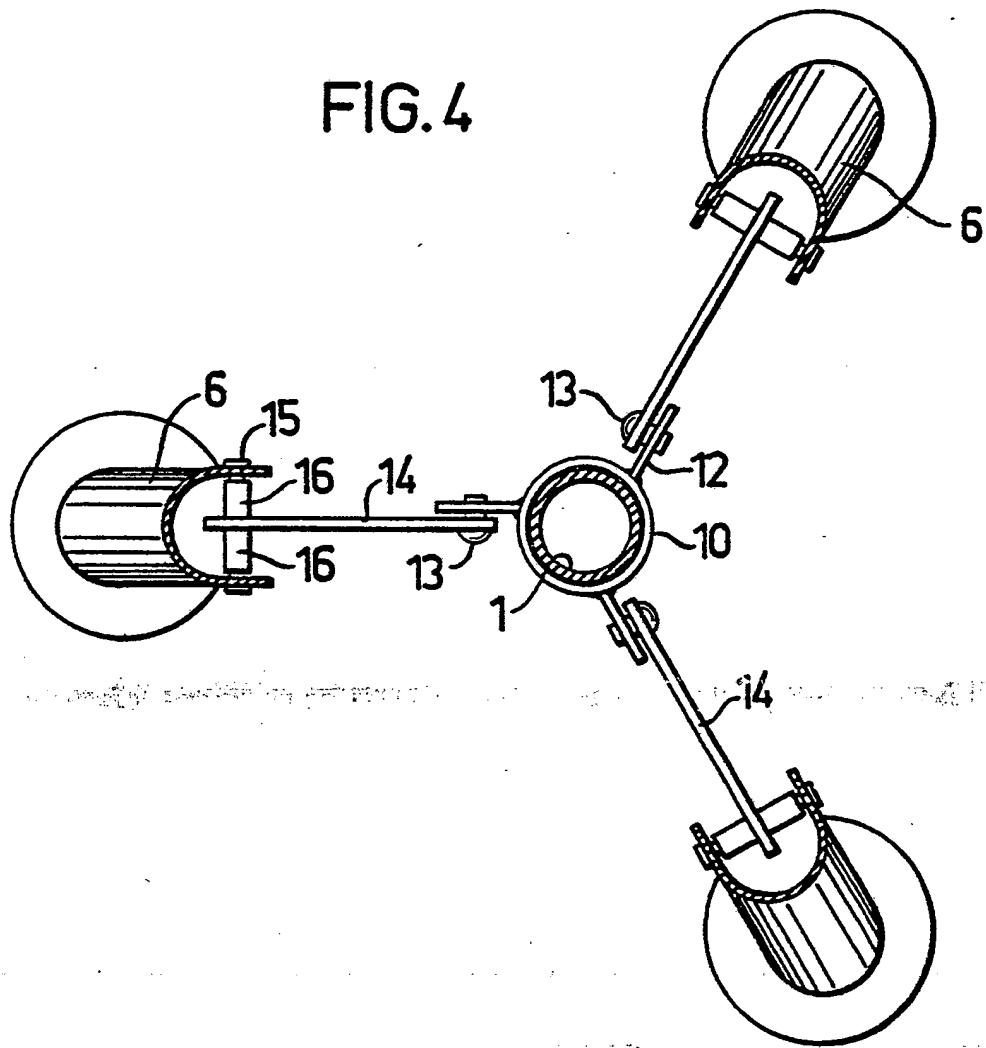
FIG. 3



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FIG.4

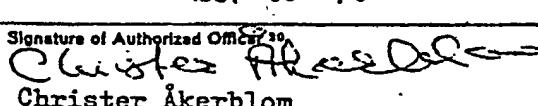


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# INTERNATIONAL SEARCH REPORT

International Application No. PCT/SE81/00046

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>14</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC <b>3</b>		
F 16 M 11/00		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>14</sup>		
Classification System	Classification Symbols	
IPC 3	F 16 M	
National Cl	42c	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>14</sup>		
SE, NO, DK, FI classes as above		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <sup>15</sup>		
Category <sup>16</sup>	Citation of Document, <sup>16</sup> with indication, where appropriate, of the relevant passages <sup>17</sup>	Relevant to Claim No. <sup>18</sup>
A	DE, C, 93 491 published 1896, October 17, Johann Georg Heimburg	1-8
A	DE, A, 1 797 166 published 1972, January 13, Karl-Heinrich Thum	1-8
A	FR, A2, 2 205 983 published 1974, May 20, Roger Pflieger	1-8
(List of documents considered to be relevant)		
<p>• Special categories of cited documents: <sup>15</sup></p> <p>"A" document defining the general state of the art</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document cited for special reason other than those referred to in the other categories</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but on or after the priority date claimed</p> <p>"T" later document published on or after the international filing date or priority date and not in conflict with the application, but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance</p>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search <sup>19</sup>	Date of Mailing of this International Search Report <sup>20</sup>	
1981-06-04	1981-06-10	
International Searching Authority <sup>21</sup>		Signature of Authorized Officer <sup>22</sup>
Swedish Patent Office		 Christer Åkerblom